January 25, 2013

Peter Maggiore
Assistant Manager, Env. Projects Office
Los Alamos Site Office, DOE
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Los Alamos, NM 87544

Jeffrey D. Mousseau, Associate Director
Environmental Programs
Los Alamos National Security, L.L.C.
P.O. Box 1663, MS M991
Los Alamos, NM 87545

RE: RESPONSE
PROPOSAL TO SUBMIT INTERIM MEASURES WORK PLAN FOR CHROMIUM CONTAMINATION IN GROUNDWATER
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-12-022

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (collectively, the Permittees) document entitled Proposal to Submit Interim Measures Work Plan for Chromium Contamination in Groundwater (Proposal) dated December 21, 2012 and referenced by EP2012-0302. NMED has reviewed the Proposal and hereby issues the following comments and direction.

1. The scope of work for the interim measures work plan (IMWP) for chromium contamination, as proposed by the Permittees, includes tasks that are not interim measures but are more appropriately described as an additional site investigation. The IMWP must address the removal of chromium-contaminated groundwater from the regional aquifer and/or containment of the chromium plume. Specifically, the Permittees must include in the IMWP the following two tasks:
a. A proposal to initiate the removal, treatment, and disposal of chromium-contaminated groundwater from existing wells R-28 and R-42, which have the highest concentrations of chromium detected in the regional aquifer, as soon as possible; and

b. A proposal to assess the potential for an increased, long-term removal of chromium from the regional aquifer by installing pilot extraction test well in the vicinity of wells R-28 and R-42, including a high-capacity pump and a system to treat contaminated groundwater. The test well must be capable of pumping at a sufficient rate to stress the regional aquifer with the intent to better refine the capture zone near R-28 and R-42, and to assess chromium plume response to the long-term, high-volume pumping. During pumping of the test well, site-specific hydraulic-properties data, water chemistry, and pressure responses must be collected from the extraction well and from all nearby monitoring wells.

2. In the IMWP, the Permittees must propose to prioritize the available funding and other resources in the following manner: (i) installation of the pump-and-treat system for wells R-28 and R-42; (ii) construction and performance assessment of the high-capacity chromium extraction test well and the pump-and-treat system for that well, and (iii) performance of other tasks outlined in the Proposal.

3. To avoid unnecessary delay in activating the pump-and-treat systems for R-28 and R-42, the Permittees must expeditiously submit the Notice of Intent (NOI) to discharge, or other appropriate request, to the NMED Ground Water Quality Bureau, and apply for any other required permits. The Permittees must provide NMED with proof of the NOI submittal (or another applicable groundwater discharge permit submittal), and any other required permit-related submittals no later than March 1, 2013.

4. In the IMWP, the Permittees must propose to submit a work plan for installation of the extraction test well and associated groundwater treatment system that includes a proposed work plan submittal date. In the IMWP, the Permittees must provide preliminary options for disposal of water from the test well treatment system, including information on any required permits and the estimated time typically needed to obtain them.

5. In the IMWP, the Permittees must propose to submit periodic status reports on the implementation and performance of the interim measures for chromium contamination.

The Permittees must submit the IMWP for chromium contamination no later than May 1, 2013.
Should you have any questions, please contact Jerzy Kulis of my staff at (505) 476-6039.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc:  T. Skibitski, NMED RPD
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File: Reading and Groundwater Chromium Plume, Sandia and Mortandad Canyon Watersheds